Deadlines and Important Dates

Hotel reservations **Immediately** Non-penalty final registration and payment July 1, 1997 Submission of manuscripts Oct. 6, 1997 Symposium Oct. 6, 1997 Publication of papers in JGE Summer 1998

Vail Valley Activities

There is much to see and do in the Vail Valley for participants and their families—including mountain hiking and biking, gondola rides, river rafting, tennis, golf, horseback riding, fine dining, and shopping. The program has been structured so that Wednesday is an "open day," with organized field trips and recreational activities as well as opportunities for on-your-own activities.

Organizing Committee (USGS)

Ms. Cathy Ager Mr. Richard Sanzolone Dr. Larry Gough Dr. Ronald Severson Dr. Paul Lamothe Dr. David Smith

Mr. Sherman Marsh

Scientific Committee Dr. Willard Chappell Dr. Betsy Kagey Dr. Donald Runnells Dr. Brian Davies Dr. Olle Selinus Dr. Ron Fuge Dr. Robert Garrett Dr. Iain Thornton

Dr. Richard Wanty

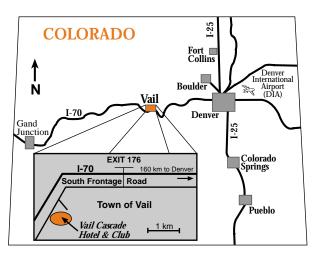
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Final Circular

Program Summary and Registration Materials



International Symposium on **Environmental Geochemistry**

October 5-10, 1997 Vail, Colorado USA

organized by

U.S. Geological Survey (USGS), The Association of Exploration Geochemists (AEG), Society for Environmental Geochemistry and Health (SEGH)

in collaboration with

International Association of Geochemistry and Cosmochemistry (IAGC)

Web Site Address: http://minerals.er.usgs.gov

PLEASE SHARE THIS NOTICE WITH COLLEAGUES

Venue

The Vail Cascade Hotel & Club is located in Vail, Colorado, 160 km west of Denver in the scenic Rocky Mountains. It is easily accessible by van transportation services or by rental car from the new Denver International Airport (DIA). Vail is world-renowned for its beauty, outdoor activities, and accommodations.

Accommodations

Hotel rooms and a limited number of suites and condominiums can be reserved through the Vail Cascade Hotel & Club. Reserve lodging early as conference rate is only in effect for reservations made prior to August 22. Hotel room charges range from \$65-\$95* per day (reserve early for the lowest rate). Families and groups should consider renting a suite or condominium as these are spacious, reasonably priced, and well appointed. For reservations call: 800-420-2424 (free inside USA) or 970-476-7111; e-mail: cascadehotel@vail.net: or fax: 970-479-7037. Be sure to mention the group code "4th ISEG Conference."

Travel Arrangements Between DIA and Vail

Participants must make their own travel arrangements. The Conference has a special agreement with *Colorado Mountain* Express (CME) for van transportation service for the 160km trip between DIA and Vail /phone: 800-525-6363 (inside the USA) or 970-949-4227; or fax 970-949-5032]. When contacting CME, please mention the special group code "4th ISEG Conference." The conference round-trip shuttle rate is \$100. You must make arrangements with CME at least 24 hours prior to your arrival at the airport. Scheduled departure times from DIA to Vail follow: 08:30, 10:00, 11:45, 12:45, 14:00, 15:00, 16:30, 17:30, 19:00, and 21:30. Rental cars are readily available at DIA (leasing for about \$38-\$48/day) and should be reserved well in advance. There is **no** airline service to the Vail Valley in October.

Registration Fees

A registration fee of \$285 is due no later than July 1, 1997 (\$325 after July 1). This includes the program with abstracts, refreshment breaks, opening reception on Sunday, October 5, and banquet on Thursday, October 9. One-day passes will be available for attendance at the presentation sessions and refreshment breaks for \$150 per day. Students may register for \$100 with a valid student card (excludes banquet); spouses for \$100 (social functions only). Methods of payment: check payable to "4th ISEG" or charge (VISA or MasterCard). All registration, workshop, and field trip fees must accompany registration form (enclosed). For refund policy, see registration form.

Workshops, Excursions, and Field Trips

Workshops: October 5, Sunday (register by July 1 see enclosed registration form)

- 9:00 a.m.-5:00 p.m. Acid-Forming Materials and Land Reclamation, taught by Scott Fisher (River Bend Assoc.) and Jon Brandt (Railroad Commission, Texas). Attendance limited to 25. The character of naturally occurring and rehabilitated acid dominated ecosystems and the concepts of reclamation, toxicity, and acid-forming materials (afm)/acid mine drainage (amd) will be discussed. Fundamental mineralogy of afm, oxidative processes, controlling mechanisms, and characteristics of the end products are examined. Analytical techniques for the identification and quantification of the amounts of afm/amd will be described. Interpretive frameworks will be illustrated. Agronomic and hydrologic reclamation problems related to afm/amd are discussed in the context of ecosystem rehabilitation. Mitigation options. costs, and planning procedures are presented.
- 1:00 p.m.-5:00 p.m. \$50 Collecting geochemical data for both exploration and environmental purposes, taught by Richard K. Glanzman (CH2M Hill) and L. Graham Gloss (Colorado School of Mines). Attendance limited to 50.

Data collected and analyzed for exploration purposes can also be used for environmental purposes. An appreciation of both the objectives and the regulatory requirements associated with environmental compliance is required. Modification of standard exploration survey practices to meet environmental survey specifications will result in both improved exploration assessment and establishment of documented baseline conditions for future property development. Topics to be addressed include: orientation/background surveys, representative sampling, analytical requirements, risk considerations, and liabilities. Time will be available to answer questions about the commonalities and differences of each type of survey.

Possible Excursions: October 8, Wednesday (register by October 5—at time of Symposium)

- Central City casinos
- Day trip to Aspen, Colo. Local recreational activities Golf tournament
- Runner's tour of Vail Village

Field Trips: October 8, Wednesday, and October 10, Friday through October 12, Sunday (register by July 1 see enclosed registration form)

- Rocky Flats Environmental Technology Site (Wednesday, October 8).
- · Rocky Mountain Arsenal environmental cleanup and tour (Wednesday, October 8).
- Clear Creek watershed (Wednesday, October 8).
- Leadville, Colorado (Wednesday, Öctober 8).
- Eagle Mine, Eagle County (Wednesday, October 8). Climax Molybdenum Mine (Wednesay, October 8).
- Upper Animas River watershed (Friday, Saturday, and Sunday, October 10–12).

^{*}All quoted fees are in U.S. dollars.